## Message

From: Orme-Zavaleta, Jennifer [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3C5A111DC377411595E5B24B5D96146B-ORME-ZAVALETA, JENNIFER]

**Sent**: 1/31/2021 6:21:00 PM

**To**: Rodan, Bruce [rodan.bruce@epa.gov]

CC: Blackburn, Elizabeth [Blackburn.Elizabeth@epa.gov]

**Subject**: Fwd: Follow Up to Discussion

Attachments: Weaver Environ Epi 2019 Neighborhood SES PM2.5 CV DM.pdf; Mirowsky JESEE 2017 Residential SES CV Metabolic

Health.pdf; aging-v12i23-202341.pdf; Rappold EST 2017 Community Wildfire Vulnerability Index.pdf; Ward-Caviness

Epigenetics Neighborhood disadvantage.pdf

Take a look. Haven't responded back yet. Any thoughts before I do?

Jennifer Orme-Zavaleta, PhD
Acting Assistant Administrator and
Principal Deputy Assistant Administrator
Office of Research and Development
US EPA

Offic Ex. 6 Personal Privacy (PP)
Cell.
Sent from my iPhone

Begin forwarded message:

From: "Cascio, Wayne" < Cascio. Wayne@epa.gov>

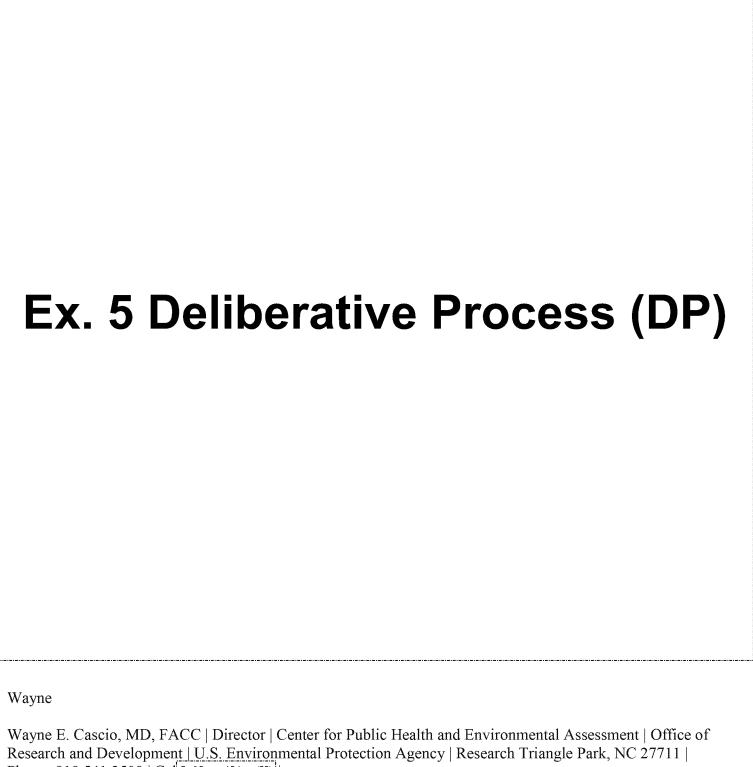
Date: January 30, 2021 at 12:20:56 PM EST

To: "Orme-Zavaleta, Jennifer" <Orme-Zavaleta.Jennifer@epa.gov>

Cc: "Holt, Kay" < Holt.Kay@epa.gov>
Subject: RE: Follow Up to Discussion

Jennifer – On Friday I had a long conversation with Charles Lee on the topic of EJ. With the Agency's new found interest in EJ he asked that I write a summary of our conversation as a starting point to develop an approach to summarize existing evidence and generate new evidence to support policy and rule changes that would incorporate evidence of social factors interacting with environmental exposures to cause health inequities. The text I intended to send him is below. I'm sharing with you first so that if any of it gives you pause you can modify. There are no promises here, what I wrote just acknowledges some of our previous work, the importance of the problem and the value of working to find solutions. Wayne

## Ex. 5 Deliberative Process (DP)



Phone: 919.541.2508 | Cel Ex. 6 Personal Privacy (PP)

From: Lee, Charles < Lee. Charles @epa.gov> Sent: Friday, January 29, 2021 9:44 PM

To: Cascio, Wayne < Cascio. Wayne@epa.gov>

Subject: Follow Up to Discussion

Hi Wayne

Here are a number of the articles I mentioned today. The key one is attached. This is Rachel Morello Frosch's article that found a correlation between measures of residential segregation and cancer risk associated with ambient air toxics. This is the article which gave rise to my thinking about environmental effects modification by social factors. Citations for this and other relevant articles are below.

- Morello-Frosch, Rachel, and Bill M Jesdale. "Separate and unequal: residential segregation and estimated cancer risks associated with ambient air toxics in U.S. metropolitan areas." Environmental health perspectives vol. 114,3 (2006): 386-93. doi:10.1289/ehp.8500
- Morello-Frosch, Rachel, and Edmond D Shenassa. "The environmental "riskscape" and social inequality: implications for explaining maternal and child health disparities." Environmental health perspectives vol. 114,8 (2006): 1150-3. doi:10.1289/ehp.8930
- Bell, Michelle L and Francesca Dominici, "Effect Modification by Community Characteristics on the Short-Term Effects of Ozone Exposure and Mortality in 98 US Communities," American Journal of Epidemiology, Vol 167, No. 8, DOI: 10.1093/aje/kwm396, February 25, 2008
- Nordone, A, et.al., "Associations between historical residential redlining and current age-adjusted rates of emergency department visits due to asthma across eight cities in California: an ecological study," Lancet Planet Health 2020; 4: e24-31, https://www.thelancet.com/action/showPdf?pii=S2542-5196%2819%2930241-4<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.thelancet.com%2Faction%2Fsh">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.thelancet.com%2Faction%2Fsh owPdf%3Fpii%3DS2542-5196%252819%252930241-4&data=04%7C01%7COrme-Zavaleta.Jennifer%40epa.gov%7C11221822b1be4d74e60e08d8c54362e9%7C88b378b367484867acf976aacbe ca6a7%7C0%7C0%7C637476240558336710%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAi LCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=JF6qpbGTcSldhFahIkUMg0TS vhpTBRq9Xv1yDSvxdyQ%3D&reserved=0>
- Hoffman, Jeremy S, Vivek Shandas, and Nicholas Pendleton, "The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas," Climate, January 13, 2020, https://www.mdpi.com/2225-

1154/8/1/12/htm<a href="https://gcc02.safelinks.protection.outlook.com/?url=https//3A%2F%2Fwww.mdpi.com%2F2">https://gcc02.safelinks.protection.outlook.com/?url=https//3A%2F%2Fwww.mdpi.com%2F2</a> 225-1154%2F8%2F1%2F12%2Fhtm&data=04%7C01%7COrme-

Zavaleta.Jennifer%40epa.gov%7C11221822b1be4d74e60e08d8c54362e9%7C88b378b367484867acf976aacbe ca6a7%7C0%7C0%7C637476240558346668%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAi LCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=qo1b%2FjyCYUFyPwVDln9Z4 Q%2BWYUM3okS8O7vv9u083os%3D&reserved=0>

I look forward to getting copies of the articles you shared with me **Ex. 5 Deliberative Process (DP)** 

## Ex. 5 Deliberative Process (DP)

## Ex. 5 Deliberative Process (DP)

Best Charles

Charles Lee
Senior Policy Advisor for Environmental Justice
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2201A)
Washington, DC 20460
William Jefferson Clinton Building South, Room 2226B
Tel: 202-564-2597

Tel: 202-564-2597 Cell Ex. 6 Personal Privacy (PP)